"Interactive Caregiver Portal for the Visualization of Activity and Location Data in an Alzheimer's Population" Emad Davis '19; Katrin Schenk, Associate Professor, Physics



The student researcher will build an interactive web application that will allow Alzheimer's patient caregivers to visualize and interact with data collected by our Functional Monitoring (FM) system. The FM system uses ubiquitous computing devices (e.g. cellphones and smartwatches) to continuously collect patient location and activity data in the home and community. As of today, the FM system has collected 234 patient-months of data. This kind of data can be classified into representations of important behaviors and can provide the caregiver with crucial information about the patient's wellbeing and disease trajectory. Making this data easy to understand and manipulate is critical for our site to be useful for caregivers. To facilitate this, we will incorporate an informational component that will help caregivers understand how to use their loved one's data to provide better care. We will also conduct caregiver interviews to test the usability and design of the application.

